

TECHNICAL DATA - ENGINE 250/300/380 SX/MXC/EXC/EGS '98 (all models out of USA)

Engine	250 SX	250 EXC, EGS	300 EXC, EGS	380 SX	380 EXC, EGS
Design	Liquid-cooled single-cylinder two-stroke engine with Twin Valve Control exhaust system and KTM Torque Chamber				
Piston displacement	249 ccm		297 ccm	368 ccm	
Bore / stroke	67.5 / 69.5 mm (2.66 / 2.74 in)		72 / 73 mm (2.84 / 2.88 in)	78 / 77 mm (3 / 2.98 in)	
Fuel	SUPER fuel, research octane no 95, mixed with high-grade two stroke oil (Shell Advance Racing X)				
Oil / gasoline ratio	1:50 - 1.60 when using high grade two stroke oil. When in doubt, please contact your importer or use 1:40 mix ratio to be on the safe side				
Crankshaft bearing	1 deep-groove ball bearing / 1 cylinder roller bearing				
Connecting rod bearing	needle bearing				
Piston pin bearing	needle bearing				
Piston	cast piston		forged piston	cast piston	
Piston ring	two plain compression rings				
Dimension "X" <small>(upper edge piston - upper edge cylinder)</small>	0 + 0.1 mm (0 + 0.004 in)				
Ignition timing	1.9 mm (0.07 in) (17 °) BTDC	1.2 mm (0.05 in) (13.5 °) BTDC	1.2 mm (0.05 in) (13.5 °) BTDC	2.1 mm (0.08 in) (17 °) BTDC	1.4 mm (0.06 in) (13 °) BTDC
Spark plug	NGK BR 8 ECM				
Electrode gap	0.6 mm (0.024 in)				
Dimension "Z" <small>(height of the control flap)</small>	48 mm (1.9 in)		46 mm (1.7 in)	50.5 mm (1.99 in)	
TVC start open	5400/min		5300/min	5200/min	
TVC fully open	7550/min		7750/min	7200/min	
Primary drive	straight cut spur gears, primary ratio 25:72			straight cut spur gears, primary ratio 26:72	
Clutch	multiple disc clutch in oil bath				
Transmission	5 speed, claw actuated				
Gear ratio					
1 st Gear	15:29		15:29	15:29	15:29
2 nd Gear	17:27		18:26	18:26	18:26
3 rd Gear	19:25		19:22	19:24	19:22
4 th Gear	21:23		21:20	21:23	21:20
5 th Gear	23:21		23:18	23:21	23:18
Gear lubrication	0.8 l engine oil 20W-40 (Shell Advance VSX4)				
Rear wheel ratio	14:50	14:50 / 15:48 / 15:40 / 13:50	14:50 / 15:48 / 15:40	14:50	13:50 / 15:40
Available chain sprockets	13t / 14t / 15t for chain ⁵ / ₈ x 1/4"				
Available final sprockets	38t / 40t / 42t / 45t / 48t / 50t / 52t for chain ⁵ / ₈ x 1/4"				
Coolant	1.3 litres, 40% anti freeze, 60% water, at least -25 °C (-13 °F)				
Ignition system	KOKUSAN 2K-1	SEM K11		KOKUSAN 2K-1	SEM K11
Generator output	no generator	12V 130W		no generator	12V 130W
Carburetor	flat-slide carburetor, carburetor setting see table 3				
Air-filter	wet foam type air filter insert				

TOLERANCES AND FITTING CLEARANCES	
Piston fitting clearance	0.05 mm (250) 0.06 mm (300) 0.08 mm (360)
Piston ring end gap	0.3–0.4 mm
Connecting rod bearing - radial clearance	0.021–0.032 mm
Transmission shafts end float	0.1–0.2 mm
Clutch springs - length	Ø 2.5 mm new = 43 mm, minimum length = 42 mm

GASKET THICKNESSES	
Crankcase	0.5 mm
Clutch cover	0.5 mm
Cylinder bottom gasket	as required
Available cylinder bottom gaskets	0.2/0.4/0.5/0.7 mm
Cylinder-head gasket	O-rings

TIGHTENING TORQUES			
Flange bolts - cylinder-head	M 8	35 Nm	(25 ft.lb)
Nuts-cylinder base	M 10	35 Nm	(25 ft.lb)
Flywheel collar nut	M 12x1	60 Nm	(44 ft.lb)
Nut for primary sprocket (LH thread)	M 18x1.5	150 Nm	(110 ft.lb)
Nut for inner clutch hub	M 18x1.5	100 Nm	(74 ft.lb)
Crankcase and cover bolts	M 6	8 Nm	(6 ft.lb)
Swingarm pivot	M 14	100 Nm	(74 ft.lb)
Collar nut rear wheel spindle	M 20x1.5	80 Nm	(60 ft.lb)
Other screws	M 6	10 Nm	(7 ft.lb)
	M 8	25 Nm	(19 ft.lb)
	M 10	45 Nm	(33 ft.lb)

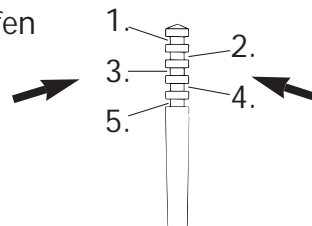
BASIC CARBURETOR SETTING						
TABLE 3		250 EGS AUSTRALIA	250 SX EUROPE 250 EXC EUROPE 250 EGS FRANCE	300 EXC EUROPE 300 EGS AUSTRALIA 300 EGS FRANCE	380 EGS AUSTRALIA	380 SX, EXC EUROPE
	Carburetor	Keihin PWK 38	Keihin PWK 38	Keihin PWK 38	Keihin PWK 38	Keihin PWK 38
	Carburetor setting number	240496	280495	210495	300596	200596
	Main jet	175 (170/180)	175 (170)	175 (170)	175 (170/165)	175 (165/170)
	Idling jet	45 (42/48)	45 (42)	45 (42/48)	45 (42/40)	45 (42/48)
	Starting jet	85	85	85	85	85
	Jetneedle	N85C (N85D)	N85D (N85E)	N85D	NOZG (NOZH/NOZI)	NOZH (NOZI)
	Needle position from top	III	III	III	II	II
	Throttle valve	6	6	6	6	6
	Air adjustment screw open	1.5 turn	1.5 turn	1.5 turn	1.5 turn	1.5 turn

VERGASERREGULIERUNG
CARBURETOR SETTING

KTM 250 SX / EXC '98 EUROPA KEIHIN PWK 38

MEERESHÖHE <i>ALTITUDE</i>	TEMPERATUR →		-20°C bis -7°C <i>-2°F to 20°F</i>	-6°C bis 5°C <i>19°F to 41°F</i>	6°C bis 15°C <i>42°F to 60°F</i>	16°C bis 24°C <i>61°F to 78°F</i>	25°C bis 38°C <i>79°F to 98°F</i>	37°C bis 49°C <i>99°F to 120°F</i>
	3000 m 10000 ft ↑ 2301 m 7501 ft	LSCHR LD NADEL POS HD	AS IJ NEEDLE POS MJ	1 1/2 45 N85C 4 175	1 3/4 42 N85C 3 172	2 40 N85D 2 170	2 1/4 40 N85D 1 168	2 1/2 40 N85E 1 165
2300 m 7500 ft ↑ 1501 m 5001 ft	LSCHR LD NADEL POS HD	AS IJ NEEDLE POS MJ	1 1/4 48 N85B 4 178	1 1/2 45 N85C 3 175	1 3/4 42 N85D 2 172	2 42 N85D 2 170	2 1/4 42 N85E 2 168	2 1/2 40 N85E 1 165
1500 m 5000 ft ↑ 751 m 2501 ft	LSCHR LD NADEL POS HD	AS IJ NEEDLE POS MJ	1 48 N85B 4 180	1 1/4 45 N85B 4 178	1 1/2 45 N85C 3 175	1 3/4 45 N85D 3 172	2 45 N85D 3 170	2 1/4 42 N85E 2 168
750 m 2500 ft ↑ 301 m 1001 ft	LSCHR LD NADEL POS HD	AS IJ NEEDLE POS MJ	3/4 50 N85B 4 182	1 48 N85B 3 180	1 1/4 45 N85C 3 178	STANDARD 1 1/2 45 3 175	STANDARD 1 3/4 45 3 172	2 42 N85E 3 170
300 m 1000 ft ↑ Meeresniveau Sea level	LSCHR LD NADEL POS HD	AS IJ NEEDLE POS MJ	1/2 50 N85A 5 185	3/4 48 N85B 4 182	1 45 N85C 4 180	1 1/4 45 N85C 3 178	1 1/2 42 N85D 2 175	1 3/4 42 N85D 2 172

LSCHR = Luftregulierschraube offen
LD = Leerlaufdüse
POS = Clip Position von oben
HD = Hauptdüse



AS = Air screw open from fully-seated
IJ = Idling jet
POS = Clip position from top
MJ = Main jet

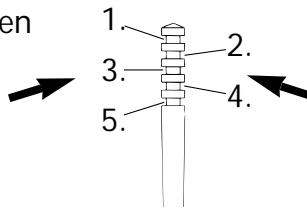
NICHT FÜR STRASSEN BETRIEB
Kraftstoff: Euro-Super bleifrei ROZ 95
NOT FOR HIGHWAY USE
Fuel: Euro-Super unleaded ROZ 95

VERGASERREGULIERUNG
CARBURETOR SETTING

KTM 300 SX / EXC '98 EUROPA KEIHIN PWK 38

MEERESHÖHE ALTITUDE	TEMPERATUR →		-20°C bis -7°C -2°F to 20°F	-6°C bis 5°C 19°F to 41°F	6°C bis 15°C 42°F to 60°F	16°C bis 24°C 61°F to 78°F	25°C bis 38°C 79°F to 98°F	37°C bis 49°C 99°F to 120°F
3000 m 10000 ft ↑ 2301 m 7501 ft	LSCHR	AS	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4
	LD	IJ	45	42	40	40	40	38
	NADEL	NEEDLE	N85D	N85D	N85D	N85E	N85E	N85E
	POS	POS	4	3	2	1	1	1
	HD	MJ	175	172	170	168	165	165
2300 m 7500 ft ↑ 1501 m 5001 ft	LSCHR	AS	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2
	LD	IJ	48	45	42	42	42	40
	NADEL	NEEDLE	N85C	N85D	N85D	N85D	N85E	N85E
	POS	POS	4	3	2	2	2	1
	HD	MJ	178	175	172	170	168	165
1500 m 5000 ft ↑ 751 m 2501 ft	LSCHR	AS	1	1 1/4	1 1/2	1 3/4	2	2 1/4
	LD	IJ	48	45	45	45	45	42
	NADEL	NEEDLE	N85C	N85C	N85D	N85D	N85D	N85E
	POS	POS	4	4	3	3	3	2
	HD	MJ	180	178	175	172	170	168
750 m 2500 ft ↑ 301 m 1001 ft	LSCHR	AS	3/4	1	1 1/4	STANDARD	1 1/2	2
	LD	IJ	50	48	45	STANDARD	45	42
	NADEL	NEEDLE	N85C	N85C	N85D	N85D	N85D	N85E
	POS	POS	4	3	3	3	3	3
	HD	MJ	182	180	178	175	172	170
300 m 1000 ft ↑ Meeresniveau Sea level	LSCHR	AS	1/2	3/4	1	1 1/4	1 1/2	1 3/4
	LD	IJ	50	48	45	45	42	42
	NADEL	NEEDLE	N85B	N85C	N85C	N85D	N85D	N85E
	POS	POS	5	4	4	3	2	2
	HD	MJ	185	182	180	178	175	172

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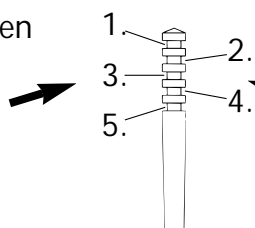
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Kraftstoff: Euro-Super bleifrei ROZ 95
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Fuel: Euro-Super unleaded ROZ 95

VERGASERREGULIERUNG
CARBURETOR SETTING

KTM 380 SX / EXC '98 EUROPA KEIHIN PWK 38

MEERESHÖHE ALTITUDE	TEMPERATUR →		-20°C bis -7°C -2°F to 20°F	-6°C bis 5°C 19°F to 41°F	6°C bis 15°C 42°F to 60°F	16°C bis 24°C 61°F to 78°F	25°C bis 38°C 79°F to 98°F	37°C bis 49°C 99°F to 120°F
	3000 m 10000 ft ↑ 2301 m 7501 ft	LSCHR LD NADEL POS HD	AS IJ NEEDLE POS MJ	1 1/2 45 NOZH 3 175	1 3/4 42 NOZH 2 172	2 40 NOZH 1 170	2 1/4 40 NOZI 1 168	2 1/2 40 NOZI 1 165
2300 m 7500 ft ↑ 1501 m 5001 ft	LSCHR LD NADEL POS HD	AS IJ NEEDLE POS MJ	1 1/4 48 NOZG 3 178	1 1/2 45 NOZH 2 175	1 3/4 42 NOZH 1 172	2 42 NOZI 1 170	2 1/4 42 NOZI 1 168	2 1/2 40 NOZI 1 165
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750 m 2500 ft ↑ 301 m 1001 ft	LSCHR LD NADEL POS HD	AS IJ NEEDLE POS MJ	3/4 50 NOZG 3 182	1 48 NOZG 2 180	1 1/4 45 NOZH 2 178	STANDARD 1 1/2 45 NOZH 2 175	STANDARD 1 3/4 45 NOZI 2 172	2 42 NOZI 2 170
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